Mr John Pierce
Chairman, Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

By email: aemc@aemc.gov.au

4 May 2012

Dear Mr Pierce

Power of Choice Directions Paper

International Power-GDF Suez Australia (IPRA) appreciates the opportunity to comment on the issues paper on the Power of Choice directions paper.

Our submission to the directions paper follows our earlier submission on the Power of Choice issues paper. We have discussed general issues related to demand side in the NEM and also provided specific answers to a number of the questions raised in the paper.

Should you have any enquiries regarding this matter please do not hesitate to contact either David Hoch on +61 3 5135 5363 or Greg Hannan on +61 3 9617 8405.

Yours sincerely,

Stephen Orr
Strategy and Regulation Director

IPRA Submission to AEMC Directions Paper

Power of Choice – giving consumers options in the way they use electricity (EPR 0022)

4 May 2012

IPR - GDF SUEZ Australia
Level 37, Rialto North Tower, 525 Collins Street
Melbourne, Victoria 3000, Australia
Tel. +61 3 9617 8400 Fax +61 3 9617 8401
www.iprplc-gdfsuez-au.com
INTERNATIONAL POWER (AUSTRALIA) PTY LTD
ABN 59 092 560 793

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1 Introduction

IPRA welcomes the opportunity to further contribute to the AEMC's examination of demand side participation in the NEM.

International Power entered the Australian energy industry in 1996 and has grown to become one of the country's largest private energy generators, with assets in Victoria, South Australia and Western Australia. The International Power portfolio also includes Simply Energy, a significant second-tier gas and electricity retail business. The business has invested around A$5 billion in the Australian energy market.

In February 2011, International Power combined with the energy assets of GDF SUEZ to form a world leader in independent power generation, with more than 72,360 MW of power generation worldwide and further 15,500 GW under construction. GDF SUEZ also has expertise in energy management services globally through its Cofely business.

In Australia, IPRA employs 920 employees, generates 12 per cent of the energy in the National Electricity Market (NEM) and retails electricity and gas to 300,000 accounts in Victoria, South Australia and (recently) New South Wales through its retail business Simply Energy.

2 General comments on demand side

In August 2011, IPRA responded to the second stage issues paper on demand side from the AEMC. As an abridged summary of this submission, IPRA argued customers must have:

- An appropriate level of knowledge to choose or be able to access a service that can provide advice or manage a demand side response on their behalf;
- A pricing framework that incentivises demand response;
- Effective and timely information to facilitate efficient economic decisions; and
- Access to appropriate technology to facilitate a response.

The Commission has indicated that it is guided on this issue by the National Electricity Objective (NEO)[1]. We support such an approach and believe that any reforms in this area must be demonstrated to be in the long term best interests of consumers before changes are pursued.

We note the Commission has identified the following four themes in the Directions paper:

- Role of pricing;
- Supply chain;
- Consumer participation; and

[1] p. ii of the Directions report
[2] Victoria is the only NEM State without retail price caps in place
[3] NER clause 7.7(a)(7) describes the access of customers to their own data - "a financially responsible Market Participant's customer upon request by that customer to the financially responsible Market Participant for information relating to that

- Networks.

Our comments on each of these four areas are described as follows.

Supply chain

- The NEM continues to operate largely as a one-sided market, where generators are obliged to offer their generation into the market but loads are essentially absent from the economic optimisation process.
- Generation pricing is deregulated in the wholesale market yet in most NEM States, customer bills are dominated by fixed costs from regulated network service providers and shielded by retail price caps[2]. Pricing from end to end of the supply chain remains opaque and there is little incentive for customers to monitor their usage and very limited feedback between pricing and usage.
- It is our view that the absence of efficient and effective price signals in the regulated areas of networks and retail have been the greatest impediment to demand side participation in the NEM.

Role of pricing

- IPRA supports the timely provision of cost reflective network charges as a matter of priority. The opaque nature of electricity retail pricing structures could be overcome through greater transparency and itemisation of the actual network and other costs in billing information. This would give greater information to consumers on how the nature of their usage influences network charges and costs.
- IPRA's view is that current tariffs/contracts for customers contribute to the inefficient use of networks and inefficient investment, by rewarding poor network utilisation and penalising efficient network users.
- Retail pricing for customers is also distorted by the impost of the costs of policies related to climate change. This combined with the overall opaque nature of retail pricing dilutes the feedback loop in customers experience between their usage and pricing.
- IPRA resists any measures which give demand response or distributed generation preferential treatment over conventional generation.

Consumer participation

- Before effective and practical demand side management arrangements are implemented, a public education campaign would be required to give customers the basic information on the reasons and benefits of change.
- Any rights to information and benefits of a demand side management capability must rest with the customer. However, IPRA also believes that these may be re-assigned to other parties by agreement and for a fee.

[2] Victoria is the only NEM State without retail price caps in place

- The greater use of interval metering creates opportunities to use of the internet for delivery of market pricing information in real time and control of appliances. IPRA is supportive of innovation in this area but maintains that this must be consumer choice driven rather than through mandatory regulatory measures.
- Technology is needed to enable demand side management. Unfortunately current "smart" meters are not able to provide customers and networks with useful information. Improving information to customers and improving the customer interface to data is essential to encourage technological innovation and public acceptance in the area of interval metering.
- Expansion of smart meters to include a "soft fusing" arrangement to enable customers load to be limited to an agreed maximum demand (tariff or contract) should be considered, but control of this capability is problematic.

Networks

- The cost of using networks should form part of customer decision making. To this end IPRA supports a greater role for capacity charging in network cost recovery. We believe that caution and a transitional approach are essential to overcome political and customer sensitivity in this area.
- Network businesses have access to customer metering data which is described in Clause 7.7(a) of the NER. However, the discussion in the directions paper about new relationships involving networks and customers (effectively bypassing retailers) raises questions relating to merchant price risks across the supply chain. Such new relationships between networks and customers would place businesses, unexposed to the merchant dynamics of the supply chain and its risks, into the energy pricing chain. This would be distortionary and inconsistent with the regulated character of network businesses. We suggest that a separate consultation be undertaken by the Commission to clarify arrangements in this area.
- IPRA is opposed to any measures which create a second line of access to customers, bypassing retailers on matters relating to the price of energy and their consumption.

3 Response to questions raised in the Directions paper

Access to energy consumption - load profile data (Questions 1 -4)

IPRA argues that any rights to information and benefits of a demand side management capability must rest with the customer (or the infrastructure owner if this is not the customer). At the same time IPRA supports the transfer of these rights to third parties by agreement and for a fee.

Our preference is for customers to have automatic rights to their own usage data. NER clause 7.7(a) currently guarantees access to data to everyone but the customer. The

customer must request access to their data[3] whereas other parties have automatic access (eg. network service providers, AEMO, AER and the relevant Ombudsman).

As noted by the Commission on p. 46 of the directions paper, "the depth and quality of available data to deliver potential benefits will depend upon the customer's meter capability."

If customers have greater and more straightforward access to their own consumption data it is our preference that technology (eg. web based tools to monitor and control appliances and other loads, smart phone applications or in-home displays) and innovation be relied on to realise any demand side benefits.

In relation to customer data it is essential that privacy provisions between consumers and retailers are respected and consumer information should not be made available to outside service providers.

Network pricing and incentives (Questions 5-10)

IPRA is supportive of the introduction of time of use pricing and our preference in this area would be for real time pricing. We appreciate the political sensitivity of this matter and note the Victorian Government's current moratorium on time of use network pricing. We suggest giving an opportunity to customers to "opt-in" to time of use pricing.

Such an "opt-in" would be likely to be attractive to those customers who have loads that do not peak when the network peaks and establish "buy-in" from the general public before extending the idea to a wider group. This approach is consistent with giving greater choice to end users while at the same time moving toward cost reflective pricing. We acknowledge that changes from flat based charges to cost-reflective charges would raise transitional issues for customers and distribution businesses who could potentially have to manage the revenue loss from the "efficient" users by increasing charges to the remaining tariff type customers.

The highly charged political climate where cost of living pressures and in particular the cost of electricity are at the centre of public debate require that any changes in this area be preceded by a comprehensive information campaign to explain the changes to customers.

In relation to a choice between volume or capacity network charges, our preference is for charging on a capacity basis. The Commission has outlined extensively the role of peak demand in driving the need for network augmentation and that during lower demand periods the marginal cost of operating networks is relatively low (essentially only network losses).

Capacity charging would further connect customer usage behaviour and decision making and the impact these have on networks. With peak demand driving network expenditure there are currently limited incentives for customers who adjust their usage to coincide with periods where the network is least stressed.

[3] NER clause 7.7(a)(7) describes the access of customers to their own data - "a financially responsible Market Participant's customer upon request by that customer to the financially responsible Market Participant for information relating to that customer's metering installation"

Customer decision making when purchasing appliances such as air conditioning is done without any regard to how these devices influence the use and cost of networks. If there was a move toward capacity charging this behaviour would change and the connection between peak usage and electricity billing would be obvious to customers through their electricity bill.

Greater reliance on network charging on a capacity basis would also create opportunities in areas such as direct load control of customer loads (such as air conditioners and pumps) and support time of use network tariffs as customers would receive as customers would be given a direct price signal on which to base their consumption decisions.

Potential for price signals to promote DSP (Question 12)

IPRA believes that demand side will not properly develop unless there are effective and efficient price signals. Resolving this single issue should be the Commission's priority if it is to realise the goal of a two-sided energy market.

Commercial driven investment in DSP technology and consumer choice in metering capability (Question 17-19)

In principle IPRA is supportive of greater deregulation in the provision of meters to customers.

Role of cost reflective pricing and co-ordination across the supply chain (Question 25-27)

The original two-sided market design of the NEM has not been realised fundamentally because customers are unable to respond to effective cost-reflective price signals. Without reform in this area of overall NEM design, demand response will remain academic in nature and unrealisable in practice or require facilitation that will fundamentally distort pricing and investment signals.

The dominance of fixed costs on retail bills and the increasing use of electricity bills to levy charges for various State and Federal climate change programs have distorted price signal effects to customers.

Furthermore, feed-in tariffs schemes which are levied on retail bills receive financial benefits associated with network savings which are never actually realised. This is because the performance of small scale solar generation at times of peak demand is not close to the capacity of the installations. This is an example of a cross subsidy that distorts efficient and effective price signals and contributes to the opaqueness of retail electricity bills.

As pointed out by the Commission, factors such as lack of information to customers and high transaction costs of change may inhibit the viability of demand side response in the NEM even with greater cost reflective pricing. Provided that cost reflective pricing initiatives are brought in transitionally and overall DSP measures forced to demonstrate more benefit than cost to customers, we are optimistic of a greater role for demand side in the NEM.

We encourage the Commission to pursue a further consultation on how relationships between networks and customers which may arise from demand side initiatives affect the merchant dynamics of the supply chain. In particular, such a consultation should consider if it is appropriate for regulated network businesses to compete in this area against commercial businesses (namely retailers) that are fully exposed to merchant price risk and receive no regulated revenue, and whose pricing is based on assumptions potentially undermined by network intervention.

The role of aggregators in wholesale markets (Question 33)

IPRA is supportive of proposals by the Commission and AEMO to create a new registration category as a demand side aggregator.

Remuneration for providing DSP in the wholesale market (Question 35)

IPRA resists any measures which give demand response or distributed generation preferential treatment over conventional generation. Any preferential treatment is likely to result in market distortions, cross subsidies and economically inefficient outcomes.

The various subsidies in the energy market are eroding market-based price signals and we resist any suggestion of further subsidies to demand side measures. This is most evident at the "top-end" of the market, where the energy only market design provides the only revenue available to generators through energy prices driven by occasional and uncertain events. By comparison, demand side response with facilitated pricing achieves both a saving in energy costs AND a capacity payment not available to the generation adjacent in the marginal price dispatch order.

If DSP is forced to rely on subsidies rather than genuine market forces, it will result in additional costs to customers rather than benefits, contribute to increasing electricity prices, further undermine the competitiveness and efficiency of the NEM and breach the NER commitment to technical neutrality.

We strongly encourage the Commission to rely on market responses over subsidies and regulation to pursue reform in this area.

State based retail price regulations (Question 44 and 45)

IPRA maintains that an ongoing commitment to retail price deregulation is necessary to facilitate sustainable investment in the NEM. Our view is consistent with those expressed by the Federal Government in their recent draft Energy White Paper (EWP). The draft EWP was clear that retail price deregulation was a priority issue in the development of future Australian energy policy.

Engagement with consumers (Question 46)

Before effective and practical demand side management arrangements are implemented, a public education campaign would be required to give customers the basic information on what they may benefit and some of the reasons behind it.

We believe that Government is best placed to deliver this message. The switch from analogue to digital television broadcasting provides a good case study for how to sell benefits to end users.

Maximising the export value of DG to address peak demand (Question 50)

Any specific demand side initiatives in the form of distributed generation should be technologically neutral so that they do not create distortions in the energy market or investment climate. As a principle, DSP measures should not receive any additional payments to conventional generation and this applies equally for distributed generation. (See also response to Question 35).

Energy efficiency policies and measures that impact on, or integrate with, the NEM (Question 51-53)

Energy efficiency should not form part of any overall DSP framework. A range of regulation currently incentivises energy efficiency measures. IPRA does not support any further subsidies to be directed toward an area which is ideally placed to rely on market forces and in particular pricing to drive changes that are economically efficient and in any event which are distortionary.

The imminent introduction of a carbon price – and the exposure of customers to this price – will be a key driver to improve energy efficiency. As this occurs, we consider that the need for subsidiary measures will diminish and should ultimately be rolled back.

An area where there may be an opportunity for regulation is in the area of appliance standards. Government could take a lead and legislate for greater efficiency standards at the device level rather than relying on measures which are targeted at the interface between the customer's power outlet and the customer's device.

An example are the power board devices which switch appliances off completely rather than allowing then to sit in standby mode and consume energy while not in operation. These devices while provided at no charge, are funded by "white certificate" efficiency schemes such as the Victorian Energy Efficiency Target (VEET).

Glossary

Abbreviation	Description
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
CO_2	Carbon Dioxide
CPI	Consumer Price Index
CPT	Cumulative Price Threshold
DPRG	Dispatch and Pricing Reference Group
EOM	Energy Only Market
ETS	Emission Trading Scheme
FCAS	Frequency Control Ancillary Service
FIT	Feed In Tariff
GFC	Global Financial Crisis
IPRA	International Power-GDF Suez Australia
LNG	Liquid Natural Gas
LRMC	Long Run Marginal Cost
MPC	Market Price Cap
MWh	Mega Watt Hours
NEL	National Electricity Law
NEM	National Electricity Market
NEO	National Electricity Objective
NER	National Electricity Regulation
NSP	Network Service Provider
O&M	Operation and Maintenance
PGG	Private Generator Group
RET	Renewable Energy Target
RIT-T	Regulatory Investment Test - Transmission
ROC	Renewable Obligation Certificate (UK)
RRP	Regional Reference Price
SACP	Shared Access Congestion Pricing
SCER	Standing Council on Energy and Resources
SRMC	Short run marginal cost
STTM	Short Term Trading Market
TFR	Transmission Frameworks Review
TNSP	Transmission Network Service Provider
TUOS	Transmission Use of System
VEET	Victorian Energy Efficiency target